

# THE FARMER & GARDENER;

## AND LIVE-STOCK BREEDER & MANAGER.

CONDUCTED BY I. IRVINE HITCHCOCK, AND ISSUED EVERY TUESDAY FROM THE AMERICAN FARMER ESTABLISHMENT, AT \$5 PER ANNUM, IN ADVANCE.

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Vol. I.

This publication is the successor of the late **AMERICAN FARMER**,

(which is discontinued,) and is published at the same price, at five dollars per year, payable in advance.

When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

**American Farmer Establishment.**

BALTIMORE: TUESDAY, SEPTEMBER 2, 1834.

**CORNSTALK FODDER.**—We give on another page of our paper an extract from the N. E. Farmer, on the subject of saving corn fodder; which we recommend to the attention of our readers.

The season is now approaching, when that business will commence; and from the long drought of the season, the crop of grass must be very short, which will give to the corn fodder an unusual value. We had by physiological reasoning on the functions of leaves, and other parts of the plant, come to the same conclusion which is proved by the experiment of Mr. Clark, in the essay alluded to; though we have never before seen the result of direct experiment on the point of the crop of corn being injured by topping in the usual way. The sap of the plant is carried from the root in its appropriate vessels, through the stalk to the leaf, where it is spread out on an extended surface for the purpose of evaporation. The leaves here, perform the same office for the plant which the kidneys do in the animal system, by carrying off the aqueous particles from the blood, and fitting it for assimilation. The sap carrying in solution the gases which compose the substance of the grain, is exposed in the cells of the leaf to the action of light, heat, and electric fluid; and having parted with the surplus watery particles by evaporation, and brought the oxygen, hydrogen and carbon in closer contact, the laws of their cohesive attraction are enabled to operate, and a union of these gases gradually taking place in the proper juices, as they descend from the leaf in their appropriate vessels, until arriving in their receptacle formed for the grain, where an oxydation of the juices takes place in such a degree as to form mucilage, starch, saccharine matter, &c. which we have already shown may be converted into sugar by the addition of a small proportion of oxygen. It will be seen by the view, that the nutritious particles must be

first elaborated in the leaf, and return to the ear before the corn can be formed; and consequently, nourishment to the ear is derived from that portion of the stalk which is above it, and can receive no further aid from the stalk after the operation of topping the corn in the usual way. The sap which is taken up by the root after the excision close to the ear, is all evaporated at the wound inflicted by the operation, and cannot benefit the grain.

We will advert to this subject again in future, and will probably make it appear, that the portion of stalk below the ear, contains much more nutriment than, the part which by so much labor, is saved in the present mode of curing fodder; and even more nourishment than a crop of clover that the same ground would produce.

### GOOD NEWS FOR THE LOWER COUNTIES.

Dr. Ducatel visited our office a few days ago, on his return from his Geological survey of the Eastern Shore and Lower Counties of Maryland. He informs us, that he has discovered marl in great abundance on the banks of rivers in Calvert and Charles counties, and on the Eastern Shore. If this discovery is turned to its proper use by the farmers, who have it in their neighborhood, it will be of much more value to the country than the gold mines of Georgia and other states where that mineral has been found, will ever be. If this marl should turn out to be as beneficial to the soil, as that with which we have been acquainted for the last fifteen years in the state of New Jersey, it will, if properly applied, quadruple the value of their land in five years.

There is great variety in the quality of marl; some abounds with undecomposed shell, so as to require burning, and will be little different in its effects from the hydrate of lime; marl of other kinds is composed of disintegrated shells, which have been decomposed by some acid supplied by the earth, and where this acid is the sulphurous, the marl is essentially the same as plaster of paris.

We have known an experiment with the Jersey marl on potatoes—A piece of ground was selected for the purpose: one portion was planted without manure, another with the usual quantity of stable manure, and a third with marl—It is many years ago, and the quantity yielded is not now

recollected, but the size of the potatoes in the different experiments is quite fresh in our recollection. Those without manure were little larger than hickory nuts; those with the manure were tolerably fair potatoes, about the usual size; those produced by the marl were very large, and one being weighed reached the weight of 1 lb. 4 oz.

The best way decidedly, of using this marl is as a top-dressing on clover, and then turning in the sward while the grass roots are still full of sap.

We have known land that would produce nothing but the poorest pasture, after dressing with ten cart loads of marl to the acre, produce the following season, one and an half tons of hay.

Dr. Ducatel has promised us specimens of the different kinds of marl he has discovered, and we have taken measures to obtain some specimens of the Jersey marl beds, that we may by comparison determine their similarity.

### MARYLAND HORTICULTURAL SOCIETY.

August 30, 1834.

At a regular meeting of the Council, this day, the following articles were exhibited:—

By Mr. John Hawks, one peck of very fine Onions, from seed this year.

By Dr. J. C. S. Monkur, two very fine turnip-rooted Beets.

By Mr. Henry Thompson, four very superior green flesh Cantaloupes.

By Mr. George W. Miller, two pecks of the Newington and red pine Peaches, very fine specimens.

By Dr. J. C. S. Monkur, 6 varieties of foreign Grapes, 2 bunches of each, viz: Sultanna, Black Prince, red, white, and golden Chasselas, Bordeaux Purple, and Orwigsburg.

By Mrs. B. I. Cohen, one basket of Plums, of a very superior quality; name of variety not known.

By Mr. J. B. Morris, two baskets of Pears, viz: the St. Michaels, and grey Beaurre.

By Mrs. Thos. L. Emory, Groombridge's Matchless, Theodore, and a fine seedling scarlet globe anemone flowered Dahlias; Lagerstræmia indica, Eugenia myrtifolia, China Roses, &c.

By Mr. Edward Kurtz, Nerium splendens, do. variegata, do. alba plena, Phlox accuminata, gardenia florida, Lobelia cardinalis, Euphorbia variegata, Plumbago capensis, &c.

**A RICH CARGO.**—The ship Sarah, the first free trader from China, arrived at London in July, with a cargo of raw silk, valued at £400,000, or £1,800,000.

## THE FARMER.

### AGRICULTURAL CHEMISTRY.

**HYDROGEN.**—The next agent in the vegetable economy, which we propose to examine, is Hydrogen.

Like oxygen, its base is never found in a disengaged state; but is combined with caloric, light, and probably with the electric fluid, in the form of gas, called hydrogen gas. It is the lightest species of ponderable matter hitherto known. It was discovered by Mr. Cavendish, in 1766; and can be procured from water, of which it forms an essential part.

To obtain it in a pure state, put some pieces of pure re-distilled zinc, or harpsichord iron wire, into a glass vial, or earthen retort, and pour on them sulphuric acid, diluted with five times its bulk of water;—an efflorescence will ensue, occasioned by the decomposition of the water, and disengagement of hydrogen, which may be collected in the pneumatic apparatus. For very accurate researches, it must be received over mercury in jars, and exposed to the joint action of dry muriate of lime and low temperature. When thus freed from its hygrometric water, its specific gravity is 0.0694 at 60° Fahr. and 30 in. of Barom. pressure.

100 cubic inches of this gas weighs 2.118 grs. It is therefore 14.4 times less dense than common air; 16 times less dense than oxygen, and 14 times less dense than nitrogen. It is with this gas that balloons are inflated, with which the inhabitants of Baltimore have lately become so familiar.

A cubic inch of atmospheric air, Prout found to weigh 30.519 gr. with the thermometer at 60° of Fahr. and the Bar. at 30 in. With these data, it would be an easy matter to calculate the exact ascensive power of a balloon, and thereby prevent such disappointments as our townsman has lately met with near the city of brotherly love.

It is supposed that hydrogen gas, from its being so much lighter than the other constituent parts of the atmosphere, must rise and float uncombined on the upper regions of the air, and when this becomes ignited by the electric fluid on the confines of the stratum, where, in contact with oxygen, it burns, and forms the northern lights, called *aurora borealis*. The burning meteors, or shooting stars, as they have been called, are this gas ignited in the same way. The singular phenomenon some months ago of the meteoric appearance in the air, was doubtless of this kind.

This gas is colorless, and possesses all the properties of air. When water is passed over

iron in a state of ignition, the oxygen and hydrogen, of which the water is composed, are separated, and the hydrogen set free in the form of gas, without color or smell. It is eminently combustible, and if pure, burns with a yellowish-white flame. When five portions of atmospheric air are mixed with two of hydrogen, and an electric spark passed through, or a taper be applied, explosion takes place—three measures of gas disappear, and moisture is deposited on the sides of the glass.

When two portions of hydrogen are mixed with one of oxygen, and detonated, the whole is condensed into water, which shows us that the composition of that substance consists of one measure of oxygen and two of hydrogen.

The result of experiment has shown that the gas we have been considering, united with the several bases mentioned below, forms the following compounds, viz:

Hydrogen with oxygen, forms water.

"	Chlorine,	muriatic acid.
"	Iodine,	hydrodic acid.
"	Prusine,	prusic acid.
"	Carbon,	sub. car. & car. hy.
"	Azote,	amonia.
"	Phosphorus,	sub. ph. & ph. hyd.
"	Sulphur,	sul. & sub. sul. hyd.
"	Arsenic,	arsenuretted hyd.
"	Tellurium,	telluretted hyd.
"	Potassium,	potassuretted hyd.

Did it comport with our present object, it would be interesting to follow out with the description of each of these compounds; but as our intention is to show principally their bearing upon agriculture, we shall content ourselves with noticing a few of them.

The hydrogen gas, which has been shown to compose two-thirds of the substance of water, enters also into the composition of all vegetable substances, and forms a considerable portion of the solid mass of wood.

Every one is familiar with the fact, that water can be changed from a solid state, (ice) to a fluid; and by the operation of a further combination of heat, or caloric, it will be converted into steam or air.

This water is composed of two parts of hydrogen gas, as we have seen, and one part of oxygen. When the laws of cohesive attraction between their particles are suffered to operate without interruption from the repelling power of caloric, these two gases enter into union, and form a solid body, called ice. When 32° of heat of Fahr. are imbibed by the mass, the particles are repelled, the attraction weakened, and a fluid, or water, is formed.

Add 212° of heat, and all continuity of particles is severed, and the mass takes its flight in air. Pass this air over ignited zinc or iron, and the compound will be resolved into its primitive parts, and exist in hydrogen and oxygen. We give this as an instance of the manner in which all material substances are undergoing the perpetual round appointed them by the Great Creator. To ascertain these laws, by which compounds are resolved into their principles, and those simples are again united into new combinations, constitutes the science of chemistry. An agricultural education ought to embrace all the elements and combinations, with the laws of their union in every plant which is intended for cultivation. How can a farmer provide food for his plants, when he knows nothing of what that food consists?

We have shown in our fifteenth number, page 119, that hydrogen enters in a solid state into the formation of gum, resin, olive oil, and into the ligneous fibre of the woods. It likewise enters into animal substances. Animal gelatin, or jelly, is composed of—

Carbon,	47.881, in 100 parts.
Oxygen,	27.207, "
Hydrogen,	7.914, "
Azote,	16.998, "
	100.

Cream from the milk of the cow, (specific gravity 1.0244) is composed of

Carbon,	59.871, in 100 parts.
Oxygen,	11.400, "
Hydrogen,	7.428, "
Azote,	21.981, "
	100.

We see that this gas has the power of being concentrated into a solid form, and entering into the composition of most bodies in nature. It forms our food, our medicine, and our deadliest poisons.

### FARMERS' MUSEUMS.

**Mr. Editor**—I have witnessed with pleasure, by perusing several numbers of your useful paper, that one object of it is to promote *Agricultural Science*, as an aid to practical agriculture. Among other modes of promoting this object is the collection of specimens, both of minerals and plants, for the instruction of farmers. This proposal, I am sure, will secure the vote, and I hope the efforts of every intelligent farmer.

A moment's attention to this subject, will show, that the specimens of nature, which must interest farmers, are very numerous.

As a prominent object of geology is to explain the nature and the variety of soils, geological specimens would of course be particularly useful, as well as interesting to farmers. Numerous minerals are, or may be used as manures, which of course would be useful in a farmers' museum.



In the vegetable kingdom the specimens connected with agriculture are still more numerous than those of minerals. Not merely the plants cultivated, but those which obstruct cultivation, might be studied to advantage by every practical farmer. Respecting the character, the modes of cultivation, and the profits of the different grasses, knowledge might be diffused with the greatest ease, and much to the advantage of agriculture. Forest trees and fruit trees might be better understood than they are at present by the most intelligent farmers. And, whenever a plant is to be studied or cultivated, the first step necessary is to have a specimen furnished.

Some portions of the animal kingdom are of course objects of the farmers' care, while others are to be avoided or destroyed. Various insect tribes are among the most powerful and constant enemies the farmer has to encounter. If specimens of these could be seen, and their history and habits learnt by those whom they annoy, their ravages might in many instances be prevented.

Not only the three great kingdoms of nature, but the works of art, might enrich a farmers' museum. Specimens, or representations of parts and plans of buildings, agricultural implements, and various manufactured salts useful as manures, would be in place in such a collection.

So evident, and so great, are the advantages which every farmer must receive from examining and studying the substances and the principles connected with his profession, that the great question is, not whether they would be useful, but whether they can be procured. To the last question, no less than the first, the answer is in the affirmative. They can be procured, and with great ease by every farmer, who will attend an education convention at his county town on the 5th of November next, and take with him any specimen he may think useful, whether he knows its name and properties or not. No matter whether it is a seed or a plant which he supposes might be cultivated to advantage, a specimen of marl or peat, or any thing else capable of promoting vegetation, or some insect or weed, which has thwarted or opposed his efforts. If he knows it, he can tell it to others; if he does not, some other person present may probably inform him what it is.

I hope, Mr. Editor, that farmers in particular will attend the conventions which I have seen proposed and recommended by numerous papers in various parts of the country, in each of the eleven hundred counties in the union, on the first Wednesday of November next, for organizing COUNTY LYCEUMS, commencing Museums or Cabinets of Nature and Art, for promoting manual labor and circuit schools, and advancing the general purposes of education and useful knowledge.

Some perhaps may be encouraged to be present and act at the proposed conventions, by the measures in progress to promote them, by the BALTIMORE UNION LYCEUM. I am informed that this Society, at a late meeting, *Resolved* unanimously, that, in their opinion, the general organization of county Lyceums, in all the counties in the states, would be eminently calculated for the advancement of American education; that they would prepare as soon as practicable, specimens of plants, minerals, penmanship, drawing and needlework, for all county Lyceums in the Union, which might

apply for the same, and that the juvenile department of the Lyceum, be invited to co-operate with the Society in accomplishing the object of the resolution.

In the spirit of this resolution, the juvenile Lyceum, have already collected several thousand specimens of minerals, and many of plants, for the object proposed. And by what they have done in two or three weeks, they afford convincing evidence, that by November, they may have sets of specimens ready, for as many county Lyceums, or county conventions, as shall apply for them: especially as Baltimore and vicinity afford a greater variety and better specimens of minerals than any other district of country in the union, and in sufficient abundance to supply a Lyceum in every county, village, school and family in America, and still retain enough for Europe and Asia.

Objects and measures, Mr. Editor, of so much importance, and so entirely feasible, I know will be forwarded by your best efforts, and I hope they will by every quarterly, monthly, weekly and daily journal in the country. AGRICOLA.

[From the N. E. Farmer.]

#### CUTTING CORN STALKS.

MR. FESSENDEN—I have made a small experiment the past season, to ascertain the damage, if any, that results to the corn crop, from topping the stalks in the usual way. And, influenced by the request of several individuals, and the thought that, perhaps, it might lead to a better knowledge of this important branch of agriculture, (the growing of corn,) I am induced to forward the particulars to you for publication. Although I am aware that *guessing* enters largely, and perhaps necessarily, into the calculations and business of the farmer, I am also aware that experiment cannot be conducted with too much precision; indeed, that experiment to be relied on, must be conducted entirely without guessing. Therefore, I have been somewhat particular in conducting this. And lest some of your readers may be a little sceptical in regard to the result, and perhaps unwilling to allow that the course which has been pursued by our ancestors, from time immemorial, is not the best course, I will give the details; and if an apology be deemed necessary, for being so very minute, I can merely say, that as the experiment seems to me so deeply to involve the interests of corn growers, it may be well to give a detailed statement of the case, so that any interested may be able to draw their own inferences. And if, in your opinion, it is worthy a place in your useful Journal, or likely to promote the interest of New-England farmers, you are at liberty to publish all, or a part, as you think best.

For a few years past, I have not cut my corn stalks until the corn was harvested, *guessing* that it was a course preferable to the one commonly pursued in this part of the country, of topping the stalks while in a green state. But for the purpose of settling this point more clearly, and with as little trouble as the case would admit, I selected, about the 5th of September, a row of corn in a field of about five acres, intending to take one that would average in quality equal to the field throughout, that I might at the same time be able to ascertain with tolerable certainty, the product of the whole field. The manure having been

spread on the surface of the ground and harrowed in lengthwise of the furrows, and the corn planted across the furrows, made it apparently less difficult to select an average row. On this row I cut the stalks from half the hills; beginning at one end and cutting the first hill, then leaving the next uncut, and so proceeding alternately, cutting one and leaving the next uncut, through the row. I had intended to confine the experiment to this row, but finally was led to extend it so far as to include four rows, and numbering them agreeably to the order in which they were standing in the field, this row may be called No. 2. There were ninety-two hills in the row, and the stalks were cut from forty-six hills, all of them in the manner that is here termed jointing, (i. e.) cut off between the ear and the first joint above the ear. I thought they were somewhat more ripe, than is usual at the time of cutting; a few of them were nearly dry. The soil was a sandy or gravelly loam, anciently covered with pine, oak and chesnut. In hoeing the corn no hills were made, but some care was taken that the surface of the ground should remain as level as possible, through the season.

My estimate of the number of hills on an acre, was made in the following manner, and if I am wrong in my calculations, I shall be corrected by some of your readers:

In an area of 200 feet square, (or 40,000 square feet,) there were sixty-two rows, with fifty-four hills in a row, making 3,348 hills. This is equal to 3,646 hills per acre, each hill occupying nearly 12 square feet of surface. There were about four stalks of corn in a hill. In estimating bushels, I have allowed the lawful weight of fifty-six pounds to the bushel.

At the time of harvesting, the corn was husked in the field. The forty-six hills from which the stalks had been cut, gave forty-eight and a half pounds of ears; and the forty-six hills on which the stalk had not been cut, gave sixty-two pounds of ears. The number of ears in the two cases was about the same; those from the uncut hills, were evidently the best filled out and the most hale; on a large proportion of them the kernels were so closely wedged in, as to make it difficult to bend the ear at all without breaking it. There was very little mouldy corn in either case, a few ears were gathered, mostly from the cut stalks, but the whole quantity was so small as to make it questionable whether cutting the stalks had much effect in this particular.

Both parcels were carefully laid aside in a dry chamber for about six or eight weeks, at the expiration of which time they were again weighed, and the parcel of ears from the uncut hills had lost in drying about two per cent. more than the other; affording some evidence that the sap continued to circulate for a greater length of time, in the uncut than in the cut stalks. The uncut hills, gave 42 lbs. 8 oz. dry shelled corn, equal to 14 oz. 12½ grs. per hill, or 60 bushels and 8 pounds per acre. The parcel from the cut hills gave 33 lbs. 7 oz. equal to 11 oz. 10 grs. per hill, or 47 bushels and 18 pounds per acre, making a loss of 12 bushels and 46 pounds per acre, by cutting the stalks. Conclusive evidence, that while the sap is in circulation, nature does not assign the stalks an unprofitable office. The pro-

duct of the whole row, taken together, cut and uncut hills, was equal to 53 bushels and 41 pounds per acre.

The product of row No. 3, taken by itself, (containing ninety-two hills, on one half of which the stalks were cut on the same day the others were,) would not show the practice of cutting stalks quite so destructive in its effects, as that exhibited in row No. 2, its whole produce was 77 lbs. 9 oz. dry corn, equal to 55 bushels and 10 pounds per acre, or 1 bushel and 25 pounds per acre more than row No. 2.

Not satisfied with resting the experiment here, I gathered the corn on rows Nos. 1 and 4, (i. e.) the rows each side, next adjoining No. 2 and 3, and on which none of the stalks had been cut. These rows, taken together, contained 186 hills, and their product of dry shelled corn was 171 lbs. 13 oz. equal to 14 oz. 12½ grains per hill, or 60 bushels and 8 pounds per acre, precisely the same average yield as that part of row No. 2, on which the stalks had not been cut; this exact coincidence, however, I think may be numbered among those cases which rarely happen.

The difference between the two rows on which half the stalks were cut, and the two rows on which none of the stalks were cut, was 5 bushels 38½ pounds per acre. If this difference arose from cutting half the stalks, (and I know of no other reason,) then cutting the whole, would have reduced the crop 11 bushels and 21 pounds per acre, or from 60 bushels and 8 pounds to 48 bushels and 43 pounds per acre.

To recapitulate row No. 2, on which the experiment was commenced, taken by itself, as follows, viz: 46 hills on which the stalks had not been cut, gave 42 lbs. 8 oz. dry shelled corn, equal to, per acre, 60 bush. 8 lbs.

46 hills from which the stalks had been cut, gave 43 lbs. 7 oz. dry shelled corn, equal to, per acre, 47 " 18 "

Loss by cutting the stalks, per acre, 12 bush. 46 lbs.

The four rows taken together, stands as follows: Nos. 1 and 4, on which no stalks were cut, gave an average of, per acre, 60 bu. 8 lbs.

No. 2 and 3, from which half the stalks were cut, gave an average of, per acre, 54 " 25½ "

Loss by cutting ½ the stalks per acre. 5 bu. 38½ lbs. 2

On cutting all the stalks, would make a loss equal to, per acre 11 bu. 21 lbs.

The difference in the result of the two cases, is 1 bushel and 25 pounds per acre; or, in the two experiments, (if it may be so termed,) there is an average loss by cutting the stalks, of 12 bushels 5½ pounds per acre; a loss quite equal to all the expense of hoeing and harvesting, especially when we consider that in hoeing, the labor of making hills was dispensed with.

If I had cut all the stalks, and obtained a crop of forty-eight bushels to the acre, the very fact of having forty-eight bushels, would, I think,

be considered by farmers generally, in this section of the country, as proof positive that the stalks were cut without injury to the crop. Or if I had gone one step farther and made large hills, at an additional expense of one dollar per acre, and thereby reduced the crop to forty-five bushels per acre, the forty-five bushels would be considered sufficient proof, that making hills (which, by the way, are usually made equally large and high on wet or dry land, without regard to soil or situation,) was labor well laid out. For although you occasionally give us a *large corn story*, swollen a little, perhaps, by *guessing* it off in *baskets*; yet, judging from what we see and know about raising corn, we call forty-five bushels, per acre a good crop.

A measured bushel, from the cut hills, weighed 57 lbs. 6 oz.—one pound less than from the *uncut*; the shrinkage being very near equal to the whole loss in weight.

If this experiment is a fair test, it seems that about twenty per cent, or one-fifth part of the crop is destroyed, by cutting the stalks in the way they are usually cut. If further experiment should establish this fact, I think there are few farmers that will hesitate long in deciding which is the most valuable, one acre of corn or five acres of top stalks. But this twenty per cent. is not saved at the expense of losing the stalks, they are worth as much, and I think more, all things considered, after the corn is harvested, than they are, gathered in the usual way. If after being bunched up in a green state, they heat or become mouldy, (a case of frequent occurrence,) they are utterly worthless, except it be for manure; I know of no animal that will eat them. But after they have once been dried by the frost and wind, a subsequent moderate degree of mouldiness, seems to be no injury.

The course which I have pursued with them, and for the present I know of no better, has been as follows: In the first place, they are cut off near the ground, and for this purpose a short scythe is found the most convenient instrument. The expense of cutting in this manner, however, is but a mere trifle, if any, more than cutting the stub stalks in the spring, and may with propriety be entered as an item of expense against the next crop, for which it is preparing the ground. After cutting, they are gathered into bunches of suitable size for binding, and three good sheaves of rye straw, if wet, will be sufficient to bind a ton. In gathering them up and laying in bunches, an active boy will do as much as a man. In this way, the whole expense of gathering, binding and loading, will not exceed 75 cents per ton. As they are very bulky, for want of barn-room, I have them stacked near the barn-yard; and I think I may safely say, that my cattle eat more pounds of stalks from an acre gathered in this way, than they would from the same acre, if gathered in the usual way. It may be objected to this, that they are not as good and nourishing as others; as to that matter, I am not able to say; but if the cattle are good judges in the case, (and I think they ought to be admitted as such,) they are quite as good and quite as nourishing, for they are eaten, apparently, with quite as good a relish. In addition to this, they are obtained without breaking off ears or breaking down hills in hauling out, oc-

currences quite frequent in the other case. They also furnish more than double the quantity of bedding for the yard, an item of no small moment in the list of "creature comforts," during our cold winters. And last, though not least, they make more than double the quantity of manure, the value of which will be duly appreciated by every good farmer, without argument. It may be said that the butt stalks can be gathered after harvest, and furnish the same quantity of litter and manure as in this case; that is true; but the expense of gathering both parts in that way, from the butts being so short and inconvenient to bind, would be three times as much as it is to gather them whole. Thus viewing the subject in various points, I think this method of managing corn stalks is much better than the old one; and that a little observation and experience will convince the most sceptical, that this branch of agriculture is not yet brought to a state of perfection; that there is yet room for improvement.

In passing through a field of corn, about the first of September, I noticed that my clothes contracted a strong smell of smut, and not being aware that I had come in contact with any smutty ears, I was led to examine a little to ascertain the cause. I found many of the corn leaves nearly covered with rust (something similar to that observed on the stalks of English grain, preceding a blight,) and intermingled with the rust, was an abundance of very minute blisters of smut, or something which had the appearance and smell of smut. As I had never observed any thing of the kind before, and smut is said to be injurious to cattle, I have thought that something of this nature might have occasioned the difference of opinion, entertained by some of your correspondents, last fall, in regard to the utility of feeding milch cows with green corn stalks. Feeding cows with smutty stalks, even if "fed to the full," would probably tend to dry them up; while feeding them plentifully with healthy stalks in a green state, would undoubtedly increase their milk.

In conclusion, I would enquire, if you can (through the columns of the Farmer,) give us the detail or result of any experiment made to ascertain the damage sustained by pasturing or feeding English grain on mowing land. I think this an important subject of inquiry to every New-England farmer, and submit it for the purpose of obtaining information. That good crops are sometimes gathered after feeding, is well known; but facts are wanted, which will fairly exhibit the effect of feeding those lands. Although this practice is handed down to us with the claims of ancient usage for its support, and perhaps might have been expedient in former days, yet, from some years' observation, I have little doubt that accurate experiment, particularly with English grain and young clover, will prove it to be a species of farming similar to that of topping corn stalks, and equally disastrous in its effects.

WM. CLARK, Jr.

Northampton, March, 1832.

The ladies of New-Haven, it is said, have pledged themselves over a cup of tea, neither to walk, talk, dance or marry, with any man who either smokes or chews tobacco.—N. Y. Transcript.



## THE BREEDER &amp; MANAGER.

[From the Farmers' Series.]

**THE SHORT-HORNS.**—Mr. Arrowsmith (of Ferryhill) who fed off his short-horns at two years old, furnished the following particulars of the prices he obtained from the butchers, viz:

In 1801, sold four for £25 each; two steers, and two heifers.

In 1802, six for £17 10s. each; three steers, and three heifers.

In 1803, four for £17 each.

In 1804, six for £18 10s. each.

In 1805, six for £17 10s. each; two steers and four heifers.

In 1806, four for £16 each.

In 1807, eight for £18 each.

In 1808, eight for £19 each.

The time of selling, from the beginning to the latter end of May. Management.—In the first winter they got straw in a fold-yard, with nearly as many turnips as they could consume; in May they went to grass; in November put to turnips through the winter, and turned to grass the first week in May.

A twin heifer, belonging to Mr. Arrowsmith, calved the last week in April, being kept the first year as the store-stock, was entered for a sweep-stakes, to be shown in June, at which time she would be two years old. She was immediately turned to grass in the usual pasture. In November she was estimated to weigh 28 stones; when she was put to the ruta бага, and hay, and oil-cake, of which she ate 4 cwt., with 2 bush. bean-meal, and 1 bush. barley. She went to grass again on the first of May, and from that period had neither cake or corn. On the 23d of July, it was the unanimous opinion of the best judges that she weighed 58 or 60 stones; having gained 30 stones in 30 weeks.

In April, 1808, Mr. Bailey saw, at Mr. Arrowsmith's, eight yearlings, intended for the course of feeding described as adopted by that gentleman; whose sales, from 1801 to 1808 inclusive, have been already particularized. They were *very lean*, not more than 15 stones each; and had they been offered for sale in a fair, no person, unacquainted with the breed, would have given more for them than £4 10s. or £5 per head.

Mr. Walton (of Middleton in Teesdale) had been, in 1808, in the habit of selling his steers, at two years and a quarter old, at from £20 to £30 each; their weight being 50 to 54 stones, fed solely on vegetable food. He often, for the sake of experiment, bought in calves of the improved, or old breed of the county, and he uniformly found that his own at two years old got fatter, and fitter for the butcher, than the others did at three, although fed and kept exactly alike.

Mr. Mason (of Chilton) in the course of an experiment to ascertain the weight of beef gained by the food given (turnips) found three steers, under three years old, to have gained 20 stones each in 20 weeks. The three steers averaged 70 stones each.

In 1816, Mr. Nesham's steer, three years and a half old, obtained the premium offered by the Durham Agricultural Society; his weight was, 4 quarters, 96 stones, 1½ lb.; tallow 11 stones, 7 lb.; hide, 8 stones.

Major Rudd (of Marton in Cleveland) obtained the premium offered by the Cleveland Agricultural Society in 1811, for the best steer, under three years old, and fed on vegetable food. The steer was sold to the butcher for 10s. per stone, and slaughtered when three years and thirteen days old; the weight of his four quarters was 96 stones.

The late Mr. Robertson (of Ladykirk, near Berwick-upon-Tweed) furnished the writer with the following particulars of short-horns, bred by him, and fed, with few exceptions, on vegetable food.

1794, an ox, four years ten months old; four quarters, 145 stones 3 lbs.; tallow, 24 stones 7 lb.

A steer, under four years old; four quarters, 106 stones; tallow, 19 stones 7 lb.

1814, a steer, three years nine months old; four quarters, 101 stones; tallow 15 stones.

1815, a steer, three years eleven months old; four quarters, 112 stones 7 lb.; tallow, 26 stones.

A heifer, three years eight months old; four quarters, 89 stones.

1817, a steer, three years two months old; four quarters, 95 stones 10 lb.; tallow, 17 stones 10 lb.

1822, an ox, four years and a half old; four quarters, 135 stones; tallow, 21 stones.

Own brother to the foregoing, three years and a half old; four quarters, 133 stones; tallow 21 stones.

A steer, three years ten months old; four quarters, 124 stones; tallow, 17 stones.

A steer, three years eight months old; four quarters, 112 stones; tallow not weighed.

A steer, bred by Col. Cooke (of Ouston, near Doncaster) fed on potatoes and straw, was slaughtered when two years and twenty-two days old; his four quarters weighed 72 stones.

Mr. John Rennie (of Phantassie) produced, at the East Lothian Agricultural Society's meeting, in November, 1823, a steer, from eighteen to twenty months old; the four quarters of which weighed 118 stones 1 lb. Smithfield weight.

The same gentleman produced before the Highland Society of Scotland a steer, aged two years four months, whose four quarters weighed 153 stones 7 lb; also a steer, aged three years six months, whose four quarters weighed 169 stones 7 lb.; tallow, 30 stones 1 lb.

Except in the three last instances, all the weights given have been by the stone of 14 lb.\*

Should the foregoing statement be considered to have been unreasonably extended, it is presumed it will, at least, be admitted, that its ample detail, if attended to, will establish the credit of the short-horns as an invaluable breed to the grazier.

In the commencement of this account, however, it was stated that they possess a combination of

\* That extraordinary animal, which was lately exhibited under the name of the "Lincolnshire Ox," although fed in that county by Lord Yarborough, was a pure short, both on the side of the sire and the dam. He measured five feet six inches in height at the shoulders, eleven feet ten inches from the nose to the setting on of the tail, eleven feet one inch in girth, and three feet three inches across the hips, shoulders, and middle of the back. His breast was only fourteen inches from the ground, and he stood one foot ten inches between the fore legs.—*Edit.*

qualities, hitherto considered incompatible. It will be obvious that the disposition to feed rapidly, in union with dairy qualifications, is here intended.

It might have the appearance of an intention to depreciate other breeds of cattle, were an enquiry instituted how the very general impression came to be entertained that animals disposed to fatten rapidly seldom give much milk. It is unquestionably true, that every perfection in cattle—whether it be one of form, of quality of flesh, of disposition to fatten, or to yield milk—can be promoted and retained solely by the breeder's devoted attention to his particular object; and if one object be allowed a paramount importance in the breeder's estimation and practice, other objects will suffer, in proportion as they are neglected.

The improvement in the carcass of the short-horns has been so surprising, and so justly valued, that many persons have allowed that completely to occupy their attention, and the dairy has been disregarded. In such a state of things, every advance towards one point has been tantamount to receding from another; because the same proceeding which tends to enhance a particular quality, will also enhance a defect, provided such defect was of previous existence.

This may be rendered more intelligible by a short illustration:—Suppose half a dozen animals to be selected in consequence of their possessing a particular quality; which quality it is proposed, on a certain established principle of breeding, to increase and render almost permanent by their union. Suppose the animals so selected to come from the hands of breeders who have neglected the milking property; the certain consequence will be, that the very union which develops and secures the desired object will tend, on the same principle, to increase the defect as to milk. In short, it will render it *habitual* in the produce. But this illustration, by a *selection*, is supposing too much for the probable state of the case. The objections which exist among breeders, for various and some cogent reasons, against crossing with the stocks of each other, unavoidably lead to the practice of breeding in and in; which, in case of any original deficiency of the milking property, must unquestionably go on to render that deficiency greater. It is hence evident that bad milking, in a breed of animals which were ever distinguished as good milkers, is not a necessary consequence of improvement in the animal in other respects, but a consequence of the *manner* in which such improvement is pursued. This the writer considers to be the reasoning properly applicable to the subject; which happily also admits of a satisfactory appeal to facts; and he is strictly justified in asserting that improved short-horns, inferior to none for the grazier, may always be selected and bred with the most valuable dairy properties. Perhaps a more plentiful and steady milker than the dam of Mr. Berry's bull, never stood over a pail, and few such carcasses of beef have been exhibited as hers, when an accident rendered it requisite to only half feed her. The bull himself has an extraordinary disposition to carry flesh, and his calves are let down in the udders like miniature cows. In fact, all the bull's family are excellent for the pail, and the quickest possible feeders. The writer has known

many instances of the highest bred short-horns giving upwards of four gallons (wine measure) of milk night and morning; and it is certain that attention only is requisite, on the part of the breeder, to perpetuate this quality in any desirable extent. While on this subject, it is proper to observe, that the excessive quantities of milk obtained from the unimproved short-horns are seldom or ever obtained from the improved; but a moderately good milker of the latter kind will be found to yield as much *butter* in the week as one of the former: the milk being unquestionably of very superior quality; and, indeed, it was likely such should be the case, and that the artificial change in the animal economy, which leads to an excessive secretion of flesh and fat, should also be productive of other rich secretions. Within the last three or four years, affidavits were sworn before a magistrate in America that an improved short-horned cow imported thither, produced after the rate of 20 lb. of butter per week.

[From the London Lancet.]

LECTURES ON VETERINARY MEDICINE,

Delivered in the University of London, by Mr. Youatt.—LECTURE IV.

THE NOSTRILS AND THE SCHNEIDERIAN MEMBRANE.

*The Nostrils.*—The nasal cavity on either side gradually diminishes anteriorly, and at length terminates in an irregular ovoid orifice on either side. The triangular spaces between the nasal and anterior maxillary bones are filled up by elastic cellular substance and integument, and which are supported by these bones, and by two cartilages on each side. The face gradually diminishes towards the lower part. The broad muzzle of the ox would be an unsightly termination of the face of the horse; in consequence of this the external nostrils are correspondingly small, and they seem barely large enough for the purpose of quiet and undisturbed breathing. But we often exact from the horse a great and cruel exertion of speed, accompanied by a corresponding expenditure of animal power, and this demanding an equivalent supply of arterial blood, and that to be obtained only by a proportional admission of air into the lungs.

The apparently contracted nostril of the horse would not admit of sufficient air to arterialise the blood, and support the rapidly-exhausted contractility of the over-worked muscular fibre, were there not a beautiful apparatus of soft distensible parts, and cartilage and muscle occasionally to expand the nostril, and admit the increased quantity of air which the animal may demand. Attached to the soft parts composing the nostril are several powerful muscles, which serve to expand these orifices, and there are two cartilages on each side, which, while they admit of the expansion of the nostrils, restore them again to their natural dimensions by their inherent elasticity. The cartilages are attached to and supported by the points of the nasal bones. There are two larger ones superiorly, and two smaller and lunated ones below. They give form to the nostril in the natural state of breathing, and likewise in the act of increased respiration, and, the muscular power which dilated them ceasing to act, they bring the nostrils back to their original dimension and form.

*The Muscles of the Nostrils.*—The principal muscles concerned in expanding the nostrils are the *transversales* (*dilatatores nasi anteriores*) that can scarcely be said to have any proper origin, for they are bound down on the point of the nose, and are inserted into each of the cartilages. When they act they draw these cartilages towards the centre of the nose, and so expand the nostrils in that direction. These muscles are not found in the hog, to whom they could be of very little use. Then there is the *dilatator lateralis*, proceeding from the point of the ridge of the superior maxillary, and inserted on the outer side of the nostril. This muscle will draw the side of the nose outwards and backwards, and so dilate the nostrils outwardly. Both these muscles acting together, and dilating the nostril both outwardly and inwardly, will very considerably enlarge the external orifice. The *dilatator lateralis* is an exceedingly powerful muscle in the hog, to give flexibility to his nasal spade. The absence of the former, which could scarcely be useful to this animal, and the extraordinary size and strength of the other, are pleasing illustrations of the adaptation of animals to their situation and destiny. Another muscle, the *nasalis longus*, comes from the union of the superior maxillary and malar bones, and is partly inserted into the false nostrils and dilate them.

*The False Nostrils.*—These are singular contrivances. They are duplicatures of the skin, but thinner and more flexible; they are blind pouches or bags which fill up the lower side of the nostril. Their use has never been satisfactorily explained. In some measure they give additional expansion to the nostril, but when examined more closely, they serve, and particularly in laborious breathing and when the current of air would be exceedingly strong, to divert it from the superior meatus, the peculiar seat of smell, and the most sensitive part of the nostril, and where its violence might be injurious, and to direct it into the lower meatus, whence it will more readily find its way to the trachea and lungs.

Another muscle by which the nostrils, both true and false, are expanded, is the *levator labii superioris alicque nasi*, from the superior portion of the nasals, and even from the frontal bones to the upper lip, and to the skin of the nose, and the false nostrils. This muscle is not found in the hog, for in the construction of his muzzle it would be powerless. The *nasalis brevis* is a triangular-shaped muscle, occupying the unattached sides of the nasal bone, and of the opposite and corresponding border of the anterior maxillary, and connected with the whole of the interposed substance of the soft nostril; evidently tightening the substance, and so somewhat enlarging the orifice of the nostril, but more employed in supporting it, and preventing it being too much dilated. This is a muscle of little development and power in the *sheep* and *hog*, and not found in the *dog*.

All these muscles are employed in dilating the nostrils, and, in rapid progression, they have as much as they can do to dilate them sufficiently. Where are the antagonists? we find them only, and we find them of sufficient power, in the elasticity of the soft nostril generally, and more especially in that of the cartilages.

*The difference of the Nostrils in different breeds of Horses.*—All these parts are more developed, the cartilages are larger, and the integument is thinner, and more flexible, and the muscles are more powerful in proportion as the horse is formed for speed. There is not a more marked characteristic of the blood-horse than an expanded nostril. There is scarcely a more interesting object than his dilated nostril when he is sufficiently excited but not overblown; on the contrary, there is nothing so painful to observe as the spasmodic dilatation of the nostril, and the painful working of every muscle when the horse of no blood is pushed beyond his natural power. If you have ever contemplated the sudden lighting up of the countenance of the hunter, when his ears become erect, and his nostrils dilate as he first hears the cry of the hounds, and snorts and scents them afar off, you will be aware of the beauty and the use of an expanded nostril. Take the first opportunity of comparing together the confined nostril and thick skin, and quantity of cellular substance about the muzzle of the cart-horse with the far wider and more flexible one of the blood-horse.

The inhabitants of some countries were accustomed to slit the nostrils of their horses that they might be less distressed in the severe and continued exertion of their speed. The Icelanders do so at the present day: but there is no necessity for this, for nature has made ample provision for all the ordinary and even extraordinary exertion we can rationally require from the horse according to his breed and character.

The muzzle of the ox, not designed for speed and incapable of the continued exertion of it, offers a singular contrast, especially connected with the different function of the upper lip in that animal, viz: firmly to hold the food until it is torn off, not perfectly cut, by the pressure of the lower incisors against the pad which supplies the place of teeth in the upper jaw. In the *sheep* and *swine* no provision is made for speed, but as I have already observed, it is secured in the *dog*, by the expanded and circular aperture of the nostril.

The cavity of the nose is lined throughout by a soft thick membrane, extending from the common integument through its whole extent.

## THE GARDENER.

PENNSYLVANIA HORTICULTURAL SOCIETY.

At the meetings of the Pennsylvania Horticultural Society, in July and August,—

Mr. Chalmers presented specimens of the White Bonnevill Cucumber, the produce of seeds obtained from the London Horticultural Society. It is a large white, smooth variety, used for stewing.

Messrs. Dryburgh and Sherwood, the *Stapelia grandiflora*, and a fine white seedling *Phlox*.

Mr. Allen—a gigantic specimen of the *Amaranthus cruentus*.

Col. Carr—two *Dahlias*, Barret's Queen Adelaide and the General Pike, the latter a seedling.

Mr. McAvoy—some fine large Purple Figs.

Mr. Charles Kenworthy—a Cucumber of the Prizefighter variety, 18 inches long, and weighing 1½ pounds, produced from a cutting.

Mr. John Evans—leaves of the *morus multicaulis*, ten inches by seven; and the Bingham Plum,



which has remained entirely free from the attacks of insects.

Mr. Parker—apricots; the Louis le Grand Pear; a seedling Peach, a large Yellow Cling; the double variety of *Saponaria officinalis*; six varieties of *Phlox*, two of them seedlings; and flowering branches of the *Lagerstræmia*, *Champney* and *Franklin Tea Roses*.

Mr. Buist—the following Dahlias; Lord Liverpool, Countess of Liverpool, Scarlet Anemone-flora, Nymphæiflora, Red Globe, King of the Whites, Russel's maculate, La Excellente Rose, Blush Lilac and Countess of Shannon; The Grandville Rose; *R. noisetia superba*; and *R. nivea*, a shoot of which, a foot in length, contained 121 buds, and 29 full-blown, snow white, and agreeably scented flowers. The *Fuchsia globosa*, entirely new, which takes its name from the globular buds, being like half-ripe Cherries, and is a beautiful and profuse flowering species.

## MISCELLANEOUS.

### INTERNAL IMPROVEMENT.

*Great Rail Road from New York to Washington, through Philadelphia and Baltimore.*

The continuous line of rail road which is intended to run interruptedly from New York to Washington, through Philadelphia and Baltimore, is undoubtedly one of the most magnificent works of the present day, either in this country or in Europe.—In point of extent it far surpasses any line yet possessing the slightest prospect of completion in the United States. We hear indeed of lines of rail road projected in New York and elsewhere, but they are projects on paper, and will long remain there.

This series of rail roads from New York to Washington, under different charters, granted by different States, which combined into one continuous line, uniting the two large and all the intermediate cities in question, could be completed, but for one obstacle, in probably one year or eighteen months. This obstacle is the small section of twenty-six miles between Trenton and New Brunswick, in New Jersey; a section which is indeed under the operation of a charter for one of the old fashioned turnpike companies, but does not at present possess those powers of transportation and management which are necessary to transform it into a rail road.

We have procured from the best sources of information a full and accurate statement of the present condition and prospect of the whole series of these rail roads, which, combined, will bring New York and Washington within eight hours distance of each other, and of course all the intermediate cities in a like proportion. This information is so interesting that we cannot deny ourself the pleasure of communicating it to the public.

And First. The rail road from Washington to Baltimore. The length of this section is 37 miles, being a branch of what is called the Baltimore and Ohio Rail Road, chartered under the joint powers of Congress, and of the state of Maryland. This road is now in the process of construction. A large section is finished, and it is believed that it could all be completed in less than a year.

Second. From Baltimore to Port Deposit Bridge on the Susquehanna. This section is also char-

tered by the state of Maryland—the stock subscribed—the route surveyed and located, and could be put under contract and finished with great expedition. This road is nearly straight and very level—the only exception being a very small sweep up to Port Deposit Bridge. Length of this section, 41½ miles.

Third. From Port Deposit bridge to the Maryland and Pennsylvania line—distance 10 miles—This section is also chartered, the stock subscribed, route surveyed and located, and only waits the action of the New Jersey legislature upon the Trenton and New Brunswick section.

Fourth. From the Maryland and Pennsylvania line to the Columbia rail-road, near Coatesville, distance 20½ miles. This section is also chartered, surveyed and located, being in the same situation as the two preceding sections. From Coatesville to the Susquehanna the ground is particularly well adapted for a rail-road. The line laid out runs along a gentle ridge almost level the whole distance till it descends the bank of the Susquehanna. The ground resembles the famous ridge road of western New-York.

Fifth. From Coatesville on the Columbia rail-road to Broad street, Philadelphia, distance 45½ miles. This is now in use. Not a word need be said of this section to a Philadelphia reader. It is crowded daily with passengers.

Sixth. From Broad street through the Northern Liberties, &c. to the Delaware river, distance one mile. Nothing need be said of this short cut.

Seventh. From Philadelphia to Trenton bridge, distance 26½. This section we have already described. It is nearly completed, and will be ready for the locomotive before the termination of the season.

Eighth. From Trenton bridge to New Brunswick, distance 26½ miles. This is the only section throughout the whole line from Washington to New York that is not chartered for a rail road. It is in the condition of this section in which exists the whole obstacle to the completion of a line of rail-road that would confer lasting benefits on the whole Atlantic seacoast—but of this more anon.

Ninth. From New Brunswick to Jersey city opposite New York, distance 30½ miles. This section will be completed and ready for trade next year—more than half will be ready this season.

Thus at one view we have a continuous line of rail-road through the whole route from New York to Washington, a distance of 239½ miles, including the breadth of the North River, that could be constructed and made ready for locomotive travelling in about a year from this date, provided the legislature of New Jersey would remove the only obstacle that stands in the way of such a magnificent improvement.

The advantages that would follow the opening of such a rail-road can scarcely be realized at this day. We are but in the infancy of steam-power, as applicable to rail-roads. From the experience already had, it is obvious that in time it will supersede all other modes of transportation, except in bulky commodities. Men, women, children, all valuable articles of merchandise—the public mails, books, journals, &c.—perishable fruits and provisions, will all be transported by locomotive power over rail-roads. The rapidity of such a

mode can, with equal safety, be made twice or thrice the faster than the fastest steamboats; and as to canals, they are left out of sight altogether. Cities will be brought within speaking distance of each other, and towns will spring up in the wilderness.

But enough at present—a particular enumeration of the advantages of the road in question we shall reserve for another day.—*Penn. Inquirer.*

USE OF TOMATO, in quickening the action of the abdominal viscera.—Like most persons of studious or sedentary habits, I often am more or less incommoded, and my health impaired, by inaction of the stomach and bowels, so as to be under the necessity of resorting to medicine, principally cathartics. In order to enable our readers perfectly to appreciate what I am about to say of a remedy, this state of the bowels is always in some degree accompanied with a sense of straitness of the chest, and besides a general uneasiness, and lassitude, with the head ache, or some degree of pain in the region of the liver. It seems to me a recurrence of those symptoms that accompany attacks of what is called by the physicians, a liver complaint, to which I have been a good deal subject. The appetite instead of being keen becomes imperfect, with a peculiar taste of the mouth, as if something was wanting in the functions of digestion, to constitute health, for which cathartics are only a temporary relief, not a remedy.

The common Tomato, used in making gravy, at once removes this taste of the mouth, in a little time quickens the action of the liver, and removes all the above noticed symptoms and feeling; I regard it as an invaluable article of diet, or, if you please, as of medicine, or of medical dietetics.—With me it has always been an object of solicitude, to find out such diet, as should supercede the necessity of medicine. Except in pickle, which I cannot use, I eat the Tomato, in every mode of dressing, and find it perfectly adapted to my wants. In the hope of being of some use to others, these facts are stated.—*N. Y. Farmer.*

NEEDLES.—A great improvement has recently been made in the manufacture of those important articles by Mr. Walker, who has invented a needle possessing, with the most beautifully-tapered form, an usual and amazing strength, and, above all, a new finish, or silver polish, which prevents their great liability to rust, and enables them to work with a freedom hitherto unknown. They possess the greatest elasticity, yet the hardness and brilliant smoothness of their surface can be equalled only by that of a diamond.—*Court Jour.*

COMPENSATION FOR LOSSES.—A French author says: "When I lost my wife, every family in the town offered me another; but when I lost my horse, no one offered to make him good."

### CONTENTS OF THIS NUMBER.

Corn-stalk Fodder.—Good News from the lower counties—Maryland Horticultural Society's Report—A rich Cargo—Agricultural Chemistry—Farmers' Lyceum—On Cutting Corn-stalks—New-Haven ladies—The Short Horns, continued—Dr. Yessell's 4th lecture—Pennsylvania Horticultural Society's Report—Internal Improvement; Rail-Road from New-York to Washington—Use of Tomato in quickening the action of the abdominal viscera—Needles—Compensation for losses—Prices Current.

## BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday.

	PER.	FROM.	TO.
BRANDY, Apple,.....	gallon.	\$0 27	—
Peach,.....	—	—	—
BEANS, white field,.....	bushel.	—	—
BEEF, on the hoof,.....	100lbs.	5 00	—
CORN, yellow,.....	bushel.	64	67
White,.....	—	68	69
COTTON, Virginia,.....	pound.	—	—
North Carolina,.....	—	11	13
Upland,.....	—	14	15
FEATHERS,.....	pound.	—	—
FLAXSEED,.....	bushel.	1 00	1 25
FLOUR—Best white wheat family,.....	barrel.	6 50	7 00
Do. do. baker's,.....	—	6 00	6 50
Do. do. Superfine,.....	—	5 25	5 37
Super Howard street,.....	—	5 12	5 31
" wagon price,.....	—	5 00	5 25
City Mills, extra,.....	—	5 50	5 37
Do. ....	—	5 25	5 37
Susquehanna,.....	—	5 25	—
Rye,.....	—	3 37	—
GRASS SEEDS, red Clover,.....	bushel.	4 50	—
Timothy (herds of the north).....	—	3 00	—
Orchard,.....	—	3 00	—
Tall meadow Oat,.....	—	2 50	—
Herds, or red top,.....	—	1 25	—
HAY, in bales,.....	ton.	—	13 00
Broomed,.....	100 lbs	—	90
HEN, country, dew rotted,.....	pound.	6	7
" water rotted,.....	—	7	8
LAMB,.....	bushel.	30	35
MUSTARD SEED, Foreign,.....	—	4 50	5 00
Domestic,.....	—	5 00	—
OATS,.....	—	29	30
OIL, linseed,.....	gallon.	—	90
Castor,.....	—	1 70	1 80
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	—	—	—
Lady,.....	—	—	—
PLASTER PARIS, in the stone,.....	ton.	2 75	—
Ground,.....	barrel.	1 37	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	62	—
TOBACCO, crop, common,.....	100 lbs	3 50	5 00
" brown and red,.....	—	4 50	6 00
" fine red,.....	—	6 00	8 00
" wrappery, suitable.....	—	—	—
" for segars,.....	—	6 00	12 00
" yellow and red,.....	—	8 00	12 00
" yellow,.....	—	13 00	17 00
" fine yellow,.....	—	15 00	22 00
Seconds, as in quality, ..	—	4 00	5 00
" ground leaf, ..	—	5 00	9 00
Virginia,.....	—	4 00	—
Rappahannock,.....	—	3 00	4 00
Kentucky,.....	—	4 00	8 00
WHEAT, white,.....	bushel.	1 06	1 12
Red,.....	—	—	1 02
WHISKY, 1st pf. in bbls.....	gallon.	28	29
" in hds,.....	—	26	—
" wagon price,.....	—	—	—
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 75	—
" To Wheeling,.....	—	1 50	—
WOOL, Prime & Saxon Fleeces, ..	pound.	50 to 60	24 to 26
Full Merino,.....	—	40	50 22 24
Three fourths Merino,.....	—	35	42 22 24
One half do,.....	—	30	35 21 22
Common & one fourth Meri,.....	—	28	30 18 20
Pulled,.....	—	28	31 18 20

## WOOL.

LYMAN REED & CO. Commission Merchants, No. 6 S. Charles street, Baltimore, Md.—devote particular attention to the sale of WOOL. All consignments made them will receive their particular attention, and liberal advances will be made when required. May 9.

SUBSCRIBERS can have their volumes of the AMERICAN FARMER neatly half bound and lettered at this establishment, at 75 cents a volume. Most of the Nos. can also be had at 10 cents each, to complete files.

## BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	bushel.	\$0 50	—
BACON, hams,.....	pound.	11	—
Shoulders,.....	—	—	9
Middlings,.....	—	—	10
BUTTER, printed, in lbs. & half lbs.	—	31	—
Roll,.....	—	12	20
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old,.....	each.	4 00	7 00
COWS, new milch,.....	—	15 00	27 00
Dry,.....	—	9 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 62	1 75
CHOP RYE,.....	—	1 50	1 56
EGGS,.....	dozen.	9	—
FISH, Shad, trimmed,.....	—	—	—
" salted,.....	barrel.	6 37	—
Herrings, salted, No. 1 & 2,.....	—	3 87	4 00
Mackerel, No. 1, 2 & 3,.....	—	4 00	—
Cod, salted,.....	cwt.	—	2 75
LAMBS, alive,.....	each.	1 25	2 00
Slaughtered,.....	quart'r	31	50
LARD,.....	pound.	8	—
ONIONS,.....	bushel.	—	73
POULTRY, Fowls,.....	dozen.	—	—
Chickens,.....	—	2 50	2 75
Ducks,.....	—	—	2 50
POTATOES, Irish,.....	bushel.	—	75
Sweet,.....	peck.	31	—
VEAL, fore quarters,.....	pound.	7	—
Hind do. ....	—	8	—

The demand for wool is good at the prices quoted.

## ADVERTISEMENTS.



## AGRICULTURAL IMPLEMENT MANUFACTORY.

THE SUBSCRIBER respectfully informs his friends and the public, that he has on hand, and intends to keep, a general assortment of his PATENT PLOUGHS; also, an assortment on the principle of his recently PATENTED PLOUGH, which are acknowledged by those who have used them to be the best and the cheapest ploughs now in use. He manufactures HARROWS, CULTIVATORS, CORN-SHELLERS, THRASHING MACHINES, and other articles in his line; which, he trusts he can furnish of as good quality, and at as reasonable prices as they can be furnished at any other establishment in Maryland. He will, from his own Foundry, supply manufacturers with all kinds of Castings of the best quality metal, for Thrashing Machines of various powers; together with other Castings for Agricultural Implements. He will purchase, or receive on account, any quantity of old iron.

## CAUTION.

Iron Founders, Manufacturers and others, who deal in or use the article, are hereby notified that the subscriber has recently obtained LETTERS PATENT for an Improvement on the Plough, which improvement consists of a peculiar form of share, which embraces both a share and two points, and is susceptible of a reverse application, and self-sharpening by the reversion of such application. A definite description or knowledge of the improvement may be had on application to the subscriber, or any of his agents. Every infringement on his invention, either by manufacture or sale without authority, will be subject to the rigor of the law.

RICH'D. B. CHENOWETH.

P. S.—At his old stand, near Front and Ploughman-streets, near Baltimore-street Bridge, or at Jno. Gildea's, old Cheapside. Sep. 2—4t

## SEED RYE.

WINTER RYE of an excellent quality, suitable for seed, for sale at 80 cents per bushel, by I. I. HITCHCOCK, American Farmer Establishment. Sep. 2.

## TALLAVERA WHITE WHEAT.

500 BUSHELS of this seed, grown, and particularly prepared, by Col. Anthony Kimmel, Frederick County, Maryland, a sample of which may be seen at my store. For character refer to the American Farmer, (vol. 15, page 161.) Any quantity of which can be obtained about the first of September, by applying personally, or by letter, post paid, to

R. D. BURNS,  
9 Bowly's wharf.  
Sep. 2.

Price \$1.80 per 60 pounds.

## A MALE FERRET,

IN fine health and condition, is for sale at this Establishment. Price \$5. I. I. HITCHCOCK.

## TWO VALUABLE SLUTS

ARE offered for sale, each about one year old. The first is a Pointer of the very best blood; color brown with some white. She may easily be broke this fall.

The other is out of one of the beautiful greyhound Sluts sent last year from Holland to the President of the U. S. by a fine pointer sent out with the greyhounds. The slut offered is a most beautiful black animal, very active, and appears to have the nose of the pointer with the speed of the greyhound. Price of each \$10. Apply to aug. 26 I. I. HITCHCOCK.

## A MARE IN EXCHANGE FOR CATTLE.

A GENTLEMAN of Virginia is desirous of exchanging a valuable blooded brood Mare for thorough bred Durham short horn Cattle—for sheep of the best blood, or for a good Jackass. Should any gentleman be disposed to make such a barter, he shall receive further information on application to I. I. HITCHCOCK, aug. 12 Amer. Farm. Estab.

## MORUS MULTICAULIS.

THE subscriber has on hand a few hundred of this celebrated Tree, unrivalled in the quality of its leaves as food for the silk worm, for which he is ready to receive orders (accompanied by the cash) with particular directions for the delivery of the trees on or after the first of Nov. next. Price 50 cents each, \$5 per dozen, or \$40 per hundred.

The success and ease with which this tree is propagated, the extraordinary quickness of its growth, the superiority of its leaves over all others for the silk culture, and its uncommon luxuriance and beauty, altogether recommend it to the favorable notice of every farmer as a most valuable acquisition. I. I. HITCHCOCK, aug. 26. Amer. Farm. Establishment.

## SEED WHEAT, RYE, &amp;c.

THE subscriber offers his services for the procurement of Seed Wheat, Rye, &c. for those who shall provide funds in Baltimore for that purpose. He does not keep those articles on hand, and therefore can send them to those only who furnish him with the means in advance. For all such, however, he will use his best judgment to procure such grain as shall be ordered, charging a small commission for his agency. I. I. HITCHCOCK, Amer. Farm. Estab.

Note—I. I. H. has made arrangements for procuring for cash, Seed Grain of the very first quality, from some of the best farms in Maryland. aug. 12

## TURNIP SPINACH &amp; CABBAGE SEED.

A FULL supply of these seeds of several of the best varieties for summer and fall sowing, now on hand and for sale by I. I. HITCHCOCK, July 1 Amer. Farm. Estab.

## SALE OF VALUABLE CATTLE.

THE subscriber intending to break up his Dairy Establishment, will offer at public sale on THURSDAY, the 12th of September next, at his residence near Brookville, Montgomery county, Md. his entire stock of COWS, amounting to 30 head. They are all of the improved Durham Short-Horned, crossed with the stock of the Oakes' Bull, which was raised by Mr. Oakes of Massachusetts, and got by the imported bull Coelbs, and was exhibited and took the premium at the Cattle Show near Baltimore, which was held at the house of the subscriber's brother, Wm. Frame, from whom he procured the young Oakes Bull. The cows are all in fine condition, and worthy the attention of improvers. 'stock. Terms made known and att. on given on the day of sale. DAVID FRAME. aug. 26